

Claims

1. An article of manufacture comprising:

a hollow cartridge for holding compost in a biofilter, the cartridge having two ends spaced apart along an axis of the cartridge,

the cartridge being substantially a regular polygon in cross section perpendicular to the axis of the cartridge and having a side wall at each side of the polygonal cross section,

the side walls being formed with openings that are small enough to substantially retain the compost in the cartridge yet large enough to allow filaments of bacteria present in the compost to project through the openings,

the polygonal cross-sectional form of the cartridge being such that the cartridge can be placed side-by-side with a plurality of other substantially identical cartridges in an array such that each side wall of the cartridge is in parallel confronting relationship with a side wall of one of the other cartridges, and

a first side wall of the cartridge being provided with a projecting baffle structure which holds the first side wall away from a confronting side wall of an adjacent cartridge in such an array, the baffle structure defining a serpentine path for flow of air between said first side wall of the cartridge and the confronting side wall of the adjacent cartridge.

2. An article of manufacture according to claim 1, wherein the cartridge is resistant to compression parallel to the axis of the cartridge.

3. An article of manufacture comprising:

a hollow cartridge for holding compost in a biofilter, the cartridge having two ends spaced apart along an axis of the cartridge,

the cartridge being substantially rectangular in cross section perpendicular to said axis and having four side walls,

the side walls being formed with openings that are small enough to substantially retain the compost in the cartridge yet large enough to allow filaments of bacteria present in the compost to project through the openings, and

a first side wall of the cartridge being generally flat and a second side wall being provided with a projecting baffle structure which defines a serpentine path over said second side wall.

4. An article of manufacture according to claim 3, wherein the cartridge is resistant to compression parallel to the axis of the cartridge.

5. An article of manufacture according to claim 3, wherein both the first side wall and a third side wall of the cartridge are generally flat and both the second side wall and the fourth side wall of the cartridge are provided with baffle structures.

6. An article of manufacture according to claim 5, wherein the first and third side walls of the cartridge are mutually adjacent.

7. An article of manufacture according to claim 3, wherein the baffle structure has first and second longitudinal walls extending along opposite respective edges of the second side wall of the cartridge and a plurality of lateral walls each extending from one of the first and second longitudinal walls towards the other of the first and second longitudinal walls.

8. An article according to claim 7, wherein the baffle structure further includes transverse walls extending between adjacent lateral walls for imparting turbulence to air flowing along the serpentine path.

9. An assembly of substantially identical hollow cartridges for holding compost in a biofilter,

each cartridge having two ends spaced apart along an axis of the cartridge and being substantially a regular polygon in cross section perpendicular to the axis of the cartridge and having a side wall at each side of the polygonal cross section,

the side walls being formed with openings that are small enough to substantially retain the compost in the cartridge yet large enough to allow filaments of bacteria present in the compost to project through the openings, and

the polygonal cross-sectional form of the cartridge being such that the cartridges can be placed side-by-side in an array such that each side wall of a first cartridge is in parallel confronting relationship with a side wall of one of the other cartridges.

10. An assembly according to claim 9, wherein the cartridge is resistant to compression parallel to the axis of the cartridge.

11. An assembly according to claim 9, wherein a first side wall of each cartridge is provided with a projecting baffle structure which holds the first side wall away from a confronting side wall of an adjacent cartridge in the array.

12. An assembly according to claim 11, wherein the baffle structure defines a serpentine path for flow of air between said first side wall of the cartridge and the confronting side wall of the adjacent cartridge.

13. An assembly according to claim 11, wherein the baffle structure includes two opposite longitudinal walls at respective edges of the first side wall and a plurality of lateral walls each extending from one of the longitudinal walls towards the other longitudinal wall.

14. An assembly according to claim 10, wherein the cartridges are substantially rectangular in cross-section and first and second sidewalls of each cartridge are generally

flat and third and fourth sidewalls of the cartridge are provided with respective projecting baffle structures.

15. An assembly according to claim 9, wherein the cartridges are in upper and lower layers, the cartridges in the upper layer being offset from the cartridges in the lower layer along two mutually perpendicular horizontal axes.

16. An assembly according to claim 9, wherein each cartridge includes a perforated bottom wall and a mixing chamber is defined below the bottom wall between the side walls of the cartridge.

17. An assembly of substantially identical cartridges for holding compost in a biofilter, wherein each cartridge:
has two ends spaced apart along an axis of the cartridge and is substantially uniform in cross section perpendicular to the axis of the cartridge,

has an endless sidewall formed with openings that are small enough to substantially retain the compost in the cartridge yet large enough to allow filaments of bacteria present in the compost to project through the openings, and

is of cross-sectional form such that the cartridges can be placed side-by-side in an array with passages between each cartridge and adjacent cartridges.

18. An assembly according to claim 17, where each cartridge is resistant to compression parallel to the axis of the cartridge.

19. An assembly according to claim 17, including a mixing insert in the passage between a cartridge and adjacent cartridges for inducing turbulence in air flowing through the passage.

20. An assembly according to claim 17, wherein the cartridges are substantially circular in cross-sectional form.

21. An assembly according to claim 17, wherein the cartridges are substantially circular in cross-sectional form and are arranged so that a passage is bounded by three cartridges.

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